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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

09/840,444

04/24/2001

Xin Zhang

401185

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23548 7590 04/19/2007
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WASHINGTON, DC 20005-3960

EXAMINER

JONES, HUGH M

ART UNIT

PAPER NUMBER

2128

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
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3 MONTHS

04/19/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/840,444 | ZHANG ET AL. | |
| | Examiner | Art Unit | |
| | Hugh Jones | 2128 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-5 of U. S. Application 09/840,444 filed 04/24/2001 are presented for examination.

Information Disclosure Statement

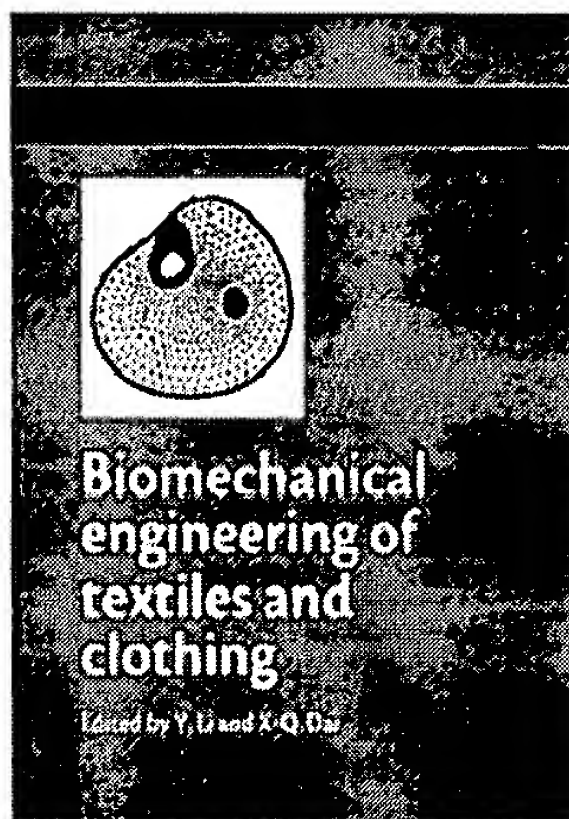
2. Please provide the following chapters from (one of) the inventor's textbook (below), namely Introduction and Theoretical Background. These chapters are material to examination of the application:

Biomechanical Engineering of Textiles and Clothing by Y. Li

Biomechanical Engineering of Textiles and Clothing enables wearers to achieve the highest level of comfort, fit and interaction from their clothing as they are designed with the mechanics of the body in mind.

Features:

- Enables products to be developed that are specifically designed for the mechanics of their end purpose (e.g. sports bra) as well as the everyday movement of the body
- Describes the techniques of biomechanical engineering principles, methods, computer simulation, measurements and applications
- Addresses issues of designing and producing textiles and clothing for optimum interaction and contact with the body
- Covers the fundamental theories, principles and models behind design and engineering for the human body's biomechanics, contact problems arising between textiles/clothing and the body



Contents

Introduction

- History of Clothing Biomechanical Engineering Design
- Biomechanical Engineering Design for Fashion Products
- Fundamental Frameworks in Clothing Biomechanical Engineering
- Clothing Biomechanical Engineering Design System: An Example

Theoretical Background

- Fiber Morphology
- Mechanical Behaviors
- Modeling of Fiber Mechanical Properties

and

A 3D Biomechanical Human Model for Numerical Simulation of Garment–Body Dynamic Mechanical Interactions During Wear

Author(s): K.W. Yeung¹ | Y. Li | X. Zhang²

doi: 10.1533/joti.2001.0050

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Journal of the Textile Institute

Print ISSN: 0040-5000

Volume: 95 | **Issue:** 1-6

Cover date: January 2004

Page(s): 59-79

Keywords

Biomechanics, human model, clothing, numerical simulation, wear, mechanical interactions

Abstract text

This paper presents a 3-dimensional biomechanical model of human body that consists of three layers different mechanical properties, namely the skin, soft tissue and bone. Based on the theory of contact mechanics and analyzing the contact characteristics between the deformable human body and a garment, we simulate the dynamic mechanical interactions between the two by considering the garment as an elastic shell with large deformation. The contact between human body and garment is modeled as a dynamic sliding interface. A finite element method is used in the time domain for deriving a numerical solution of the dynamic contact problem. Using a numerical computing method, we can compute the 3D distribution of the pressure, stress and deformation in the garment and the human body, and visualize them in color contour plots. We implement the numerical computation of the model by using commercial finite element software on a Pentium III PC computer with an example of wearing tight-fitting trousers from foot to waist.

The predicted pressure is close to the magnitude of the measurements from subjective evaluation experiments of garment pressure, indicating that the model is able to predict and simulate garment pressure during wear with reasonable accuracy. The numerical computational results show that the model can provide a comprehensive description of the mechanical interactions involved in the contact interface such as garment deformation, garment pressure, human body deformation and inner pressure of the skin due to its deformation.

Specification

3. The amendment filed 11/13/2006 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

established in databases known in the art. An example is set forth in Li, ~~Y~~ et al.,
[[Advanced Computing Technology for Integrated Design of Textiles and Apparel]]
Integrated CAD for functional textiles and apparel, published in Ergonomics of
 Protective Clothing, Proceedings of NOKOBETEF 6 and 1st European Conference on
 Protective Clothing, Stockholm, Sweden, May 7-10, 2000, which is herein

4. Applicant is required to cancel the new matter in the reply to this Office Action.

5. The original attempt to incorporate subject matter into this application by reference to *Li* (page 4, specification) is ineffective because the paper did not exist (page 3, response of 3/19/2007 – however, it is an unpublished draft).

10 amassed and established in databases known in the art.
 An example is set forth in Li, Y., Advanced Computing
 Technology for Integrated Design of Textiles and
 Apparel; Ergonomics of Protective Clothing, Proceedings
 of NOKOBETEF 6 and 1st European Conference on Protective
 15 Clothing; Stockholm, Sweden; May 7-10, 2000, which is
 herein incorporated by reference in its entirety. Such

First, Applicants have explained in detail how the error in referring to the pre-publication form of the publication in the application as filed occurred. See the response filed in November 22, 2005. The publication appeared as a result of a presentation of the paper at a Conference in Stockholm in May of 2000. In the

6. Neither was published (see response of 11/22/2005), prior to filing of the application (filing date: 4/24/2001; conference date: 5/2000; publication date after at least 5/2001):

According to Dr. Li, the paper she provided to her patent attorney in Hong Kong in connection with the preparation of the present patent application, and which is referred to on page 4 of the patent application and which was previously submitted to the Examiner, is the draft of a paper sent to the conference and presented at the conference. At a later time, after conclusion of the conference, the conference organizers decided to publish a conference Proceedings and asked the presenters at the conference to revise and submit the initially submitted papers for publication. It is Dr. Li's recollection that more than one year passed following the conference before the conference Proceedings were published. At the time of the filing of the present patent application, which is not based and (11/22/2005)

information in the two forms of the paper is substantially the same. While the foregoing information represents Dr. Li's best recollection as to what occurred, unfortunately, events now inquired into occurred some four or five years ago and correspondence regarding the conference, the paper presented, and the ultimate published form of the paper, are no longer available.

7. Applicants amendment to the specification to change the incorporation to:

established in databases known in the art. An example is set forth in Li, ~~Y~~ et al., [[Advanced Computing Technology for Integrated Design of Textiles and Apparel;]] Integrated CAD for functional textiles and apparel, published in Ergonomics of Protective Clothing, Proceedings of NOKOBETEF 6 and 1st European Conference on Protective Clothings, Stockholm, Sweden, May 7-10, 2000, which is herein constitutes new matter and is not entered. Applicants have admitted that this paper did not exist until subsequent to the filing date.

Claim Rejections - 35 USC § 101

8. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. **Claims 1-5 are rejected under 35 U.S.C. 101 as being directed to nonstatutory subject matter since the claims as a whole ~~[[are drawn to an abstract mathematical algorithm and]]~~ do not provide for a practical application, as evidenced by lack of physical transformation or a useful, tangible, and concrete result:**

creating visual images for the monitor showing modules of ~~structural~~ mechanical functional designs.

10. the claims as a whole do not provide for a tangible result, such as actually displaying the image.

Claim Rejections - 35 USC § 112

11. The following is a quotation of the first paragraph of 35 U.S.C. 112:

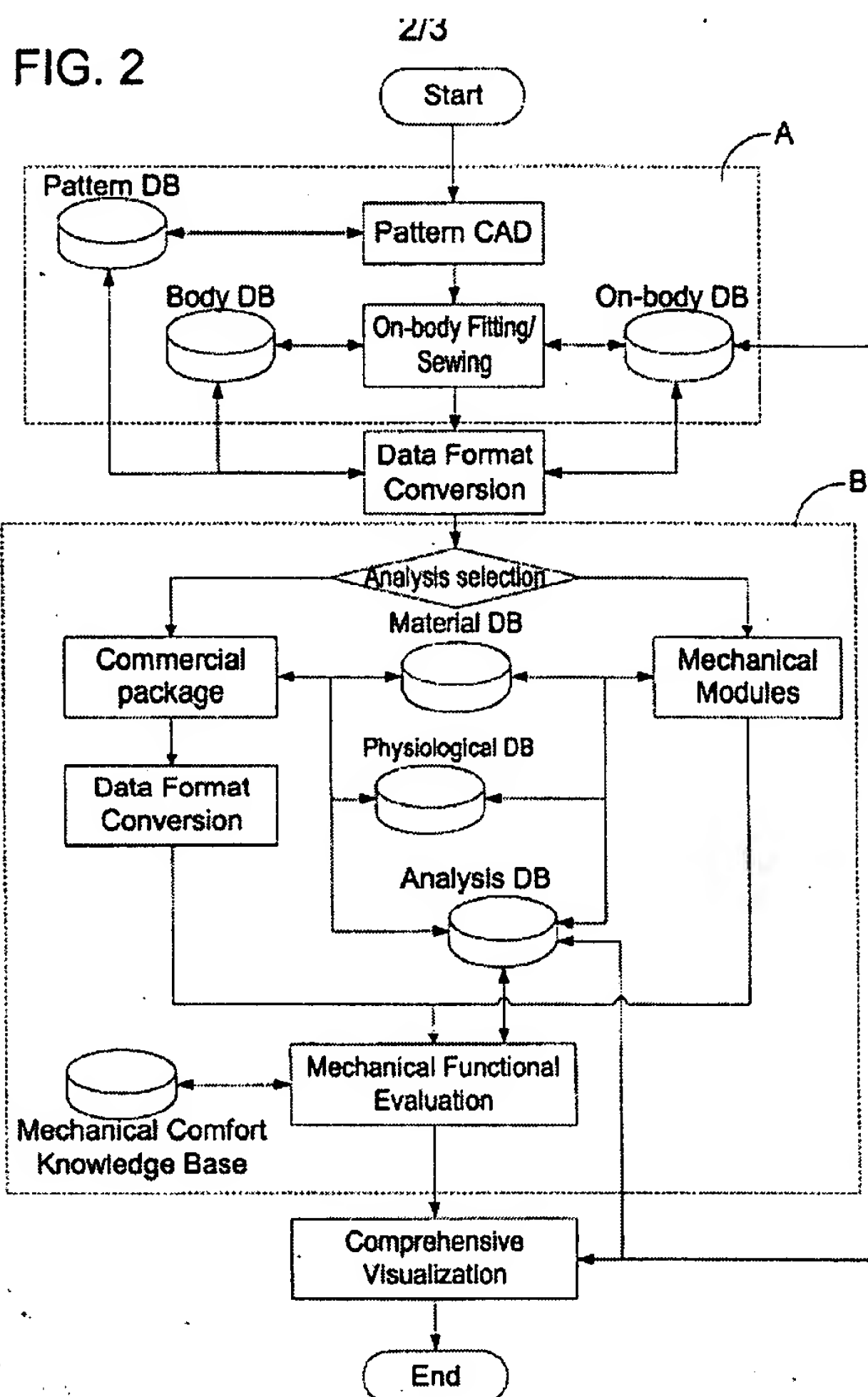
The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

12. **Claims 1-5 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.** The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claims omits a critical step *required* by the specification, namely the steps required to actually create mechanical

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functional designs of textiles and clothing using a computer. The claim recites supplying information from the databases to the computer (the claim recites “for computational simulation of the information”, but does not actually claim computationally simulating) and then creating images. The steps required to actually create the images are missing. The specification does not provide written description support for the breath of the claims - *the claims are broader than the specification on which they are based.*

13. Note fig. 2, which shows that block B is required for the invention to function:



14. **Claims 1-5 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement.** The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

15. There is insufficient disclosure pertaining to actually creating mechanical functional designs (the creation of the designs is required before they can be displayed) of textiles and clothing using a computer. See the preamble. The claim recites supplying information from the databases to the computer and then creating images. The steps required to actually create the designs are not taught in the specification in such a manner as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention without undue experimentation

16. The specification provides few enabling details of the system itself.

- Pg. 6 (using appropriate and established and specially developed computational mathematics – however, this has not been disclosed)

20 materials. By using appropriate established and
specially developed computational mathematics with
logical matching of such information, a computer may be
programmed to generate visual images of suitable
fabrics, articles of apparel and the like for use by a
textile designer and/or engineer when creating new items
25 of clothing for normal or specialised application as
appropriate or desired.

- pg. 4:

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20 mechanical comfort knowledge. Advanced computing
technologies developed on the basis of advanced
mathematical modelling of the bio-mechanical behaviour
of the human body and mechanical behaviour of the
clothing materials, are incorporated by the computer to
25 integrate and process the information available from the
databases. The information is used to create a number of
modules to enable a textile designer and/or engineer to
objectively design apparel and textile articles to serve

- pg. 5

In the block B, computational mathematics using
commercially available packages and/or specially
designed software packages with special Data Format
Conversion are used to logically match and compute
information from structural databases relating to the
textile materials. A mechanical functional evaluation is
provided that is compared with data from a Mechanical
Comfort Knowledge database, which is derived from
practical information amassed from knowledge about
structural comfort of apparel. An output is provided to
create and display a Comprehensive Visualisation.

17. The description merely lists the steps/elements in figures 2-3. Applicants contend that the prior art doesn't teach integration of body and textile models. However, the specification does not provide enabling detail for such a teaching.

18. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

19. **Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01.**

20. The omitted steps are the steps required to actually create mechanical functional designs of textiles and clothing using a computer. See the preamble. The claim recites supplying information from the databases to the computer and then creating images. The steps required to actually create the images are missing.

Claim Rejections - 35 USC § 102

21. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

22. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by *Jojić et al.*.

23. *Jojić et al.* (1999) disclose:

1) A method of creating mechanical functional designs of textiles and clothing using a computer and visual display monitor controlled by the computer, the method comprising:

supplying the computer information from databases relating to biomechanical and structural characteristics of human body and structural and mechanical characteristics of chosen textile materials for computational simulation of the information (figure 1; 2: sections 1.1: (Existing Computer Technologies in Garment Design and Advertising), 2 (3-D Body Modeling), 3 (Physics-based cloth modeling)) and

creating visual images for the monitor showing modules of mechanical functional designs figure 1; 2: sections 1.1: (Existing Computer Technologies in Garment Design and Advertising), 2 (3-D Body Modeling), 3 (Physics-based cloth modeling)).

2) The method according to claim 1 in which the database of the human body comprises human model data specific body functions, including size and shape (figure 1; 2: sections 1.1: (Existing Computer Technologies in Garment Design and Advertising), 2 (3-D Body Modeling), 3 (Physics-based cloth modeling));

3) The method according to claim 1 in which the database of the textile materials comprises clothing patterns data and product specification data (figure 1; 2: sections 1.1: (Existing Computer Technologies in Garment

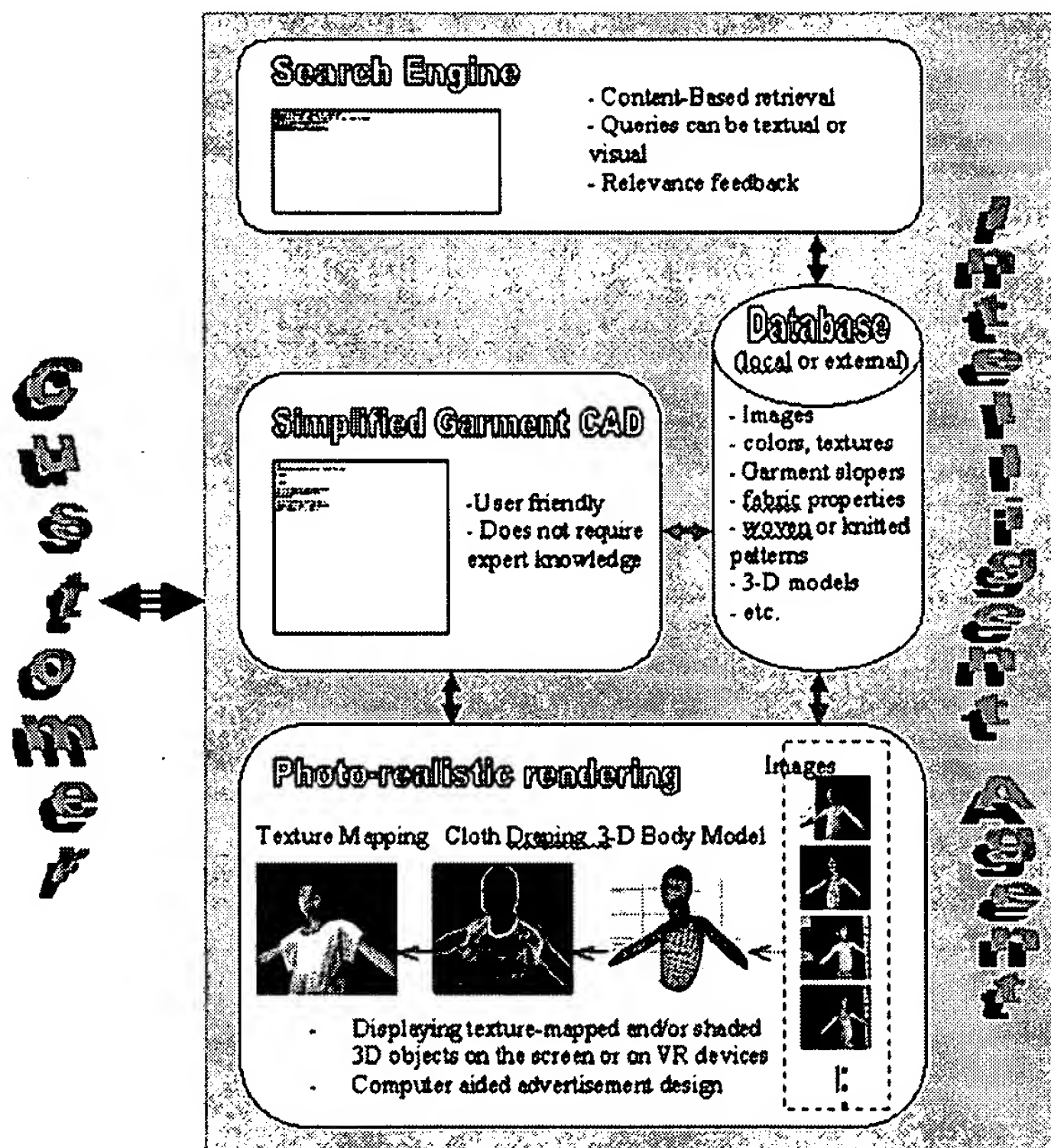
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Design and Advertising), 2 (3-D Body Modeling), 3 (Physics-based cloth modeling));

4) The method according to claim 1 in which the database of the human body comprises mechanical property data, including clothing biomechanical and mechanical comfort data (figure 1; 2: sections 1.1: (Existing Computer Technologies in Garment Design and Advertising), 2 (3-D Body Modeling), 3 (Physics-based cloth modeling));

5) the method according to claim 1 in which the database of the textile materials comprises structural and mechanical property data, including fibres, yarns, fabrics and garments (figure 1; 2: sections 1.1: (Existing Computer Technologies in Garment Design and Advertising), 2 (3-D Body Modeling), 3 (Physics-based cloth modeling)).

Fig. 1:



Claim Rejections - 35 USC § 103

24. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

25. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

26. **Claims 1-5 are rejected under 35 U.S.C. § 103(a) as being unpatentable over**

Applicant's Own Admission in view of Jojic et al..

27. Applicant admits that the databases representing structural and mechanical characteristics of a human body and structural and mechanical characteristics of textile materials were known, and that the databases relate to human geometric models, bio-mechanical models, mechanical properties of different fabrics, textile materials, and mechanical comfort knowledge was also known (page 4, specification):



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In use, databases representing structural and mechanical characteristics of a human body and structural and mechanical characteristics of textile materials are called-up for supply to the computer. Data is logically matched or manipulated to create the required modules. Such characteristics and properties have been already amassed and established in databases known in the art. An example is set forth in Li, Y., Advanced Computing Technology for Integrated Design of Textiles and Apparel; Ergonomics of Protective Clothing, Proceedings of NOXOBETEF 6 and 1st European Conference on Protective Clothing; Stockholm, Sweden; May 7-10, 2000, which is herein incorporated by reference in its entirety. Such

databases relate to human models, including human geometrical models, bio-mechanical models, mechanical properties of different fabrics, textile materials, and mechanical comfort knowledge. Advanced computing

28. Applicants has admitted (page 6) that the computational programs for the simulations are prior art :

Thus, it will be apparent that methods of the invention are provided by applying computer technology to compute and visualize biomechanical behaviour of human body and mechanical behaviour of textile materials based on developed databases relating structural functional characteristic of a human body and textile articles and materials. By using appropriate established and specially developed computational mathematics with logical matching of such information, a computer may be programmed to generate visual images of suitable fabrics, articles of apparel and the like for use by a textile designer and/or engineer when creating new items of clothing for normal or specialised application as appropriate or desired.

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29. Applicants, also admit prior art knowledge of modeling the mechanics of human/textile interactions (pg. 3, 11/24/2004):

disclosure. See page 4, lines 11-14 of the patent application. This publication demonstrates that one of ordinary skill in the art was enabled to model biomechanical characteristics or textile mechanic characteristics individually at the time of the filing of the present patent application. The present invention teaches the integration of physiological modeling and the mechanical modeling of textiles into a single methodology creating thermal functional designs of clothing (see page 4, line 25 to page 5, line 14 and Figure 2 of the patent application). Accordingly, one

30. Applicant alleged that it was not known to integrate the body and textile modeling into one methodology. AD.

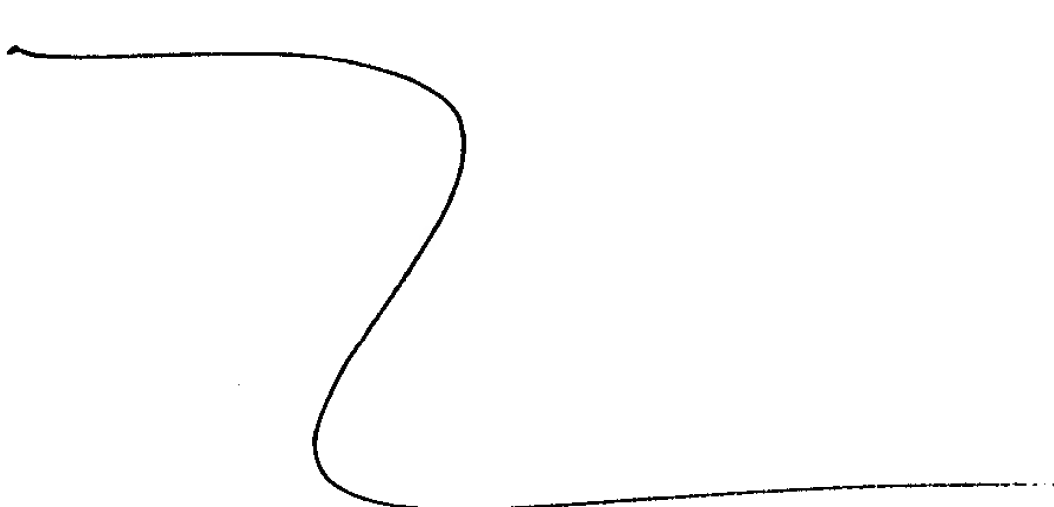
31. Jojic et al. discloses such a teaching. (fig. 1) Af.

32. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the base reference with Applicant's admission for the reasons provided in Jojic et al. (5.4 Intelligent Agent: Consultation for Garment Selection and/or Design).

Response to Arguments

33. Applicant's arguments of 3/19/2007 have been carefully reviewed, and are not persuasive.

34. Applicant's arguments with respect to the paper and related issues are not persuasive. The attempt to incorporate subject matter into this application by reference to *Li* is ineffective because the originally incorporated paper (*Li*) did not exist and was not published.



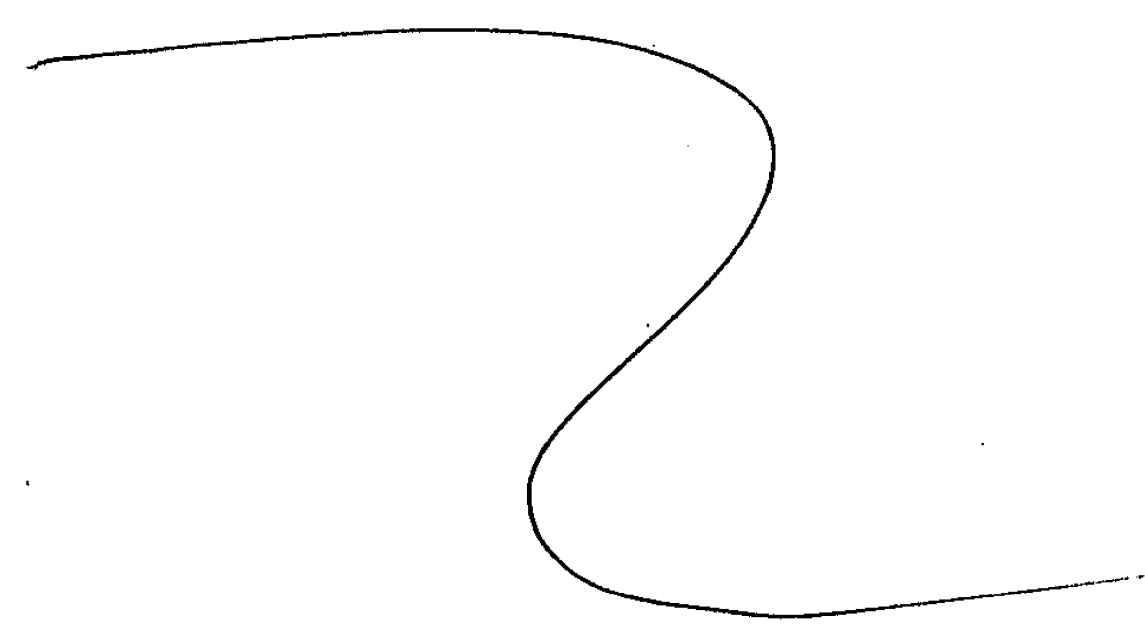
First, Applicants have explained in detail how the error in referring to the pre-publication form of the publication in the application as filed occurred. See the response filed in November 22, 2005. The publication appeared as a result of a presentation of the paper at a Conference in Stockholm in May of 2000. In the response filed November 13, 2006, Applicants supplied E-mail correspondence from one of the organizers of the Conference, Professor Holmer, explaining that the Conference was based on an initial call for papers. The authors of those papers selected for presentation were permitted and requested to revise those initial papers for publication after the Conference. It is the revised papers that were published. This description by Professor Holmer is not attorney argument. It is a presentation of factual information by a disinterested and knowledgeable person who has no reason to provide insufficient or inaccurate information.

Further, it was the Examiner's resourcefulness that first brought to the attention of Applicants' representative that there was a potential discrepancy between a

35. Neither was published (see response of 11/22/2005), prior to filing of the application (filing date: 4/24/2001; conference date: 5/2000; publication date after at least 5/2001):

According to Dr. Li, the paper she provided to her patent attorney in Hong Kong in connection with the preparation of the present patent application, and which is referred to on page 4 of the patent application and which was previously submitted to the Examiner, is the draft of a paper sent to the conference and presented at the conference. At a later time, after conclusion of the conference, the conference organizers decided to publish a conference Proceedings and asked the presenters at the conference to revise and submit the initially submitted papers for publication. It is Dr. Li's recollection that more than one year passed following the conference before the conference Proceedings were published. At the time of the filing of the present patent application, which is not based

and (11/22/2005)



information in the two forms of the paper is substantially the same. While the foregoing information represents Dr. Li's best recollection as to what occurred, unfortunately, events now inquired into occurred some four or five years ago and correspondence regarding the conference, the paper presented, and the ultimate published form of the paper, are no longer available.

Li (never published):

Advanced Computing Technology for Integrated Design of Textiles and Apparel

Y. Li

Institute of Textiles and Clothing, The Hong Kong Polytechnic University, Hung Hom, Kowloon, Hong Kong

1. Clothing Consumption Trends

Extensive consumer research has shown that modern consumers require clothing to not only look good, but also feel good in dynamic wear situations. The comfort and superior functional performance of clothing have been identified as the most important attributes demanded by modern

Li et al. (published after filing date) :

Integrated CAD for functional textiles and apparel

Yi Li, Edward Newton, Xiaonan Luo, Zhongxuan Luo

Institute of Textiles and Clothing, The Hong Kong Polytechnic University, Hung Hom, Kowloon, Hong Kong

36. The Li *et al.* incorporation constitutes new matter (even if it were published prior to Applicant's filing date, since the papers and authorship are different). No new matter can be added to an application after its filing date. See 35 USC § 132(a) and *Dart Industries v. Banner*, 636 F.2d 684, 207 USPQ (CADC 1980). Regardless, the incorporation is improper because the paper did not exist (see response of 11/22/2005), prior to filing of the application (filing date: 4/24/2001; conference date: 5/2000; publication date after at least 5/2001):

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According to Dr. Li, the paper she provided to her patent attorney in Hong Kong in connection with the preparation of the present patent application, and which is referred to on page 4 of the patent application and which was previously submitted to the Examiner, is the draft of a paper sent to the conference and presented at the conference. At a later time, after conclusion of the conference, the conference organizers decided to publish a conference Proceedings and asked the presenters at the conference to revise and submit the initially submitted papers for publication. It is Dr. Li's recollection that more than one year passed following the conference before the conference Proceedings were published. At the time of the filing of the present patent application, which is not based

37. Applicants argue:

publication during the prosecution of the present patent application. Location of that publication by the Examiner based on the original citation in the patent application of the prepublication form of the paper demonstrates the "public accessibility of that source", the controlling factor of *Howarth*. (In *Howarth*, reliance on obscure foreign patent applications not publicly accessible, by contrast, failed to complete the patent application.)

Since one of skill in the art could clearly locate the cited publication on the Internet as of the filing date of this patent application, where the publication remains available, the citation of either form of the paper completes the present patent

38. MPEP section 716.09 discusses the *Howarth* decision:

Evidence to supplement a specification which on its face appears deficient under 35 U.S.C. 112 must establish that the information which must be read into the specification to make it complete would have been known to those of ordinary skill in the art. In re Howarth, 654 F.2d 103, 210 USPQ 689 (CCPA 1981) (copies of patent specifications which had been opened for inspection in Rhodesia, Panama, and Luxembourg prior to the U.S. filing date of the applicant were not sufficient to overcome a rejection for lack of enablement under 35 U.S.C. 112, first paragraph) .

Affidavits or declarations presented to show that the disclosure of an application is sufficient to one skilled in the art are not acceptable to establish facts which the specification itself should recite. *In re Buchner*, 929 F.2d 660, 18 USPQ2d 1331 (Fed. Cir. 1991) (Expert described how he would construct elements necessary to the claimed invention whose construction was not described in the application or the prior art; this was not sufficient to demonstrate that such construction was well-known to those of ordinary skill in the art.); *In re Smyth*, 189 F.2d 982, 90 USPQ 106 (CCPA 1951).

39. In this case, the Li paper was not published and did not exist while the Li et al. paper did not exist until subsequent to the filing date of the application. The Examiner obtained the Li paper only after Applicants supplied it to the office.

40. It would have been impossible to obtain either version of the paper at the time of filing. This type of issue was addressed in Howarth.

41. Applicants argue:

Moreover, the availability of the paper prior to the filing of the present patent application and the ease of locating paper show that incorporation by reference was not necessary here; merely mentioning the paper was sufficient for enablement. *Cf.*

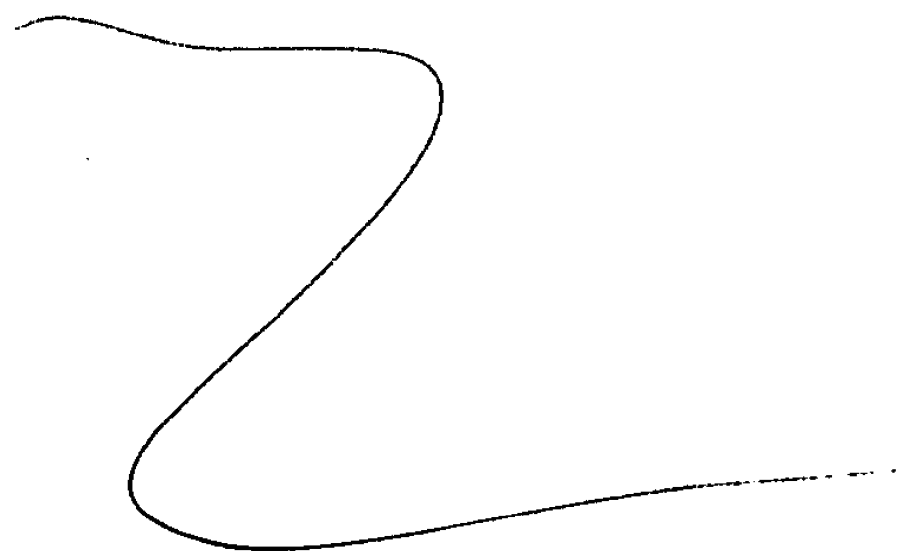
42. The paper was not available until supplied by Applicants to the office.

43. In any case, *mere reference to another application, patent, or publication is not an incorporation of anything therein* into the application containing such reference for the purpose of the disclosure required by 35 U.S.C. 112, first paragraph. *In re de Seversky*, 474 F.2d 671, 177 USPQ 144 (CCPA 1973).

44. Applicants are referred to MPEP 608 for office procedure regarding incorporation by reference.

45. Applicant's remarks on page 2 of the remarks are noted. The Examiner is *now* aware of the co-pending application.

46. The Li et al. 102 rejection is withdrawn because Applicants state that the reference was not publicly disclosed prior to filing of the application:



According to Dr. Li, the paper she provided to her patent attorney in Hong Kong in connection with the preparation of the present patent application, and which is referred to on page 4 of the patent application and which was previously submitted to the Examiner, is the draft of a paper sent to the conference and presented at the conference. At a later time, after conclusion of the conference, the conference organizers decided to publish a conference Proceedings and asked the presenters at the conference to revise and submit the initially submitted papers for publication. It is Dr. Li's recollection that more than one year passed following the conference before the conference Proceedings were published. At the time of the filing of the present patent application, which is not based

47. The Okabe rejection is withdrawn in view of new art rejections and the arguments are rendered moot.

48. **Any inquiry concerning this communication or earlier communications from the examiner should be:**

directed to: Dr. Hugh Jones telephone number (571) 272-3781,

Monday-Thursday 0830 to 0700 ET,

or

the examiner's supervisor, Kamini Shah, telephone number (571) 272-2279.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist, telephone number (703) 305-3900.

mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 308-9051 (for formal communications intended for entry)

or (703) 308-1396 (for informal or draft communications, please label *PROPOSED* or *DRAFT*).

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Dr. Hugh Jones

Primary Patent Examiner

March 29, 2007

HUGH JONES Ph.D.
PRIMARY PATENT EXAMINER
TECHNOLOGY CENTER 2100